STANLEY®

BR40
HYDRAULIC BREAKER

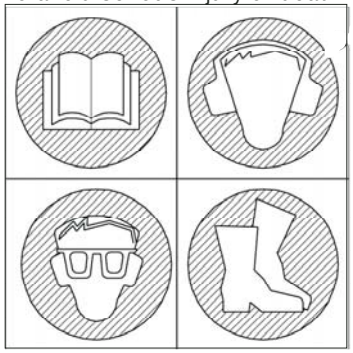
⚠ WARNING

SERIOUS INJURY OR DEATH COULD RESULT FROM IMPROPER REPAIR OR SERVICE OF THIS TOOL.

REPAIRS AND/OR SERVICE TO THIS TOOL MUST ONLY BE DONE BY AN AUTHORIZED AND CERTIFIED DEALER.

⚠ WARNING

To avoid serious injury or death



SAFETY, OPERATION AND MAINTENANCE
USER'S MANUAL

CE

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SERVICING THE STANLEY HYDRAULIC breaker. This manual contains safety, operation, and routine maintenance instructions. Stanley Hydraulic Tools recommends that servicing of hydraulic tools, other than routine maintenance, must be performed by an authorized and certified dealer. Please read the following warning.

⚠ WARNING

SERIOUS INJURY OR DEATH COULD RESULT FROM THE IMPROPER REPAIR OR SERVICE OF THIS TOOL.

REPAIRS AND / OR SERVICE TO THIS TOOL MUST ONLY BE DONE BY AN AUTHORIZED AND CERTIFIED DEALER.

For the nearest authorized and certified dealer, call Stanley Hydraulic Tools at the number listed on the back of this manual and ask for a Customer Service Representative.

CERTIFICATE OF CONFORMITY

CERTIFICATE OF CONFORMITY

CE

STANLEY®
Hydraulic Tools

I, the undersigned: Winterling, David

Surname and First names

Hereby certify that the construction plant or equipment specified hereunder:

1. Manufacturer: Stanley Hydraulic Tools, 3810 Naef Road, Milwaukie, Oregon USA
2. Representative in the Union: Stanley Dubuis 17-19, rue Jules Berthonneau-BP 3406 41034 Blois Cedex, France
3. Category: **Hydraulic Hand Held Concrete Breaker**
4. Make: **Stanley Hydraulic Tools**
5. Type: **BR40558BT(A)/BR4056201/BR4056801A/BR4056801AA**
6. Type serial number of equipment: **ALL**
7. Year of manufacture: **Beginning 2006**

Has been manufactured in conformity with the provisions of the Machinery Directive 98/37/EC

Harmonized standard applied: **EN 792-4**

We also declare that it meets the specification of Noise Directive 2000/14/EC, measured in accordance to the Conformity Evaluation Method set out in Annex VI para. 5 and evaluated during production as in Annex VI para. 6, 2nd procedure.

8. Noise related value: **21 kg**
9. Measured sound power on equipment representative of this type: **106 LwA**
10. Guaranteed sound power level for this equipment: **107 LwA**
11. Notified body for EC directive 2000/14/EC: **0404**

    SMP Svensk Maskinprovning AB
    Fyrisborgsgatan 3
    754 50 Uppsala, SWEDEN

12. Special Provisions: **None**

Issued at Stanley Hydraulic Tools, Milwaukie, Oregon USA
Date: 8/21/02

Signature

Position: Engineering Manager

P/N 52570 Rev. 1, 8/21/02
Rev. 2, 4/4/06

SAFETY SYMBOLS

Safety symbols and signal words, as shown below, are used to emphasize all operator, maintenance and repair actions which, if not strictly followed, could result in a life-threatening situation, bodily injury or damage to equipment.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER — **This safety alert and signal word indicate an imminently hazardous situation which, if not avoided, will result in death or serious injury.**

⚠ WARNING — **This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, could result in death or serious injury.**

⚠ CAUTION — **This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.**

CAUTION — **This signal word indicates a potentially hazardous situation which, if not avoided, may result in property damage.**

NOTICE — **This signal word indicates a situation which, if not avoided, will result in damage to the equipment.**

IMPORTANT — **This signal word indicates a situation which, if not avoided, may result in damage to the equipment.**

Always observe safety symbols. They are included for your safety and for the protection of the tool.

LOCAL SAFETY REGULATIONS

Enter any local safety regulations here. Keep these instructions in an area accessible to the operator and maintenance personnel.

SAFETY PRECAUTIONS

Tool operators and maintenance personnel must always comply with the safety precautions given in this manual and on the stickers and tags attached to the tool and hose.

These safety precautions are given for your safety. Review them carefully before operating the tool and before performing general maintenance or repairs.

Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations. If so, place the added precautions in the space provided in this manual.

The BR40 Hydraulic Breaker will provide safe and dependable service if operated in accordance with the instructions given in this manual. Read and understand this manual and any stickers and tags attached to the tool and hoses before operation. Failure to do so could result in personal injury or equipment damage.

- Operator must start in a work area without bystanders. The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.
- Establish a training program for all operators to ensure safe operation.
- Do not operate the tool unless thoroughly trained or under the supervision of an instructor.
- Always wear safety equipment such as goggles, ear, head protection, and safety shoes at all times when operating the tool.
- Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
- Supply hoses must have a minimum working pressure rating of 2500 psi/175 bar.
- Be sure all hose connections are tight.
- The hydraulic circuit control valve must be in the “OFF” position when coupling or uncoupling the tool. Wipe all couplers clean before connecting. Use only lint-free cloths. Failure to do so may result in damage to the quick couplers and cause overheating of the hydraulic system.
- Do not operate the tool at oil temperatures above 140°F/60°C. Operation at higher oil temperatures can cause operator discomfort and may damage the tool.
- Do not operate a damaged, improperly adjusted, or incompletely assembled tool.
- Do not weld, cut with an acetylene torch, or hard-face the tool bit.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.
- Do not exceed the rated limits of the tool or use the tool for applications beyond its design capacity.
- Always keep critical tool markings, such as labels and warning stickers legible.
- Always replace parts with replacement parts recommended by Stanley Hydraulic Tools.
- Check fastener tightness often and before each use daily.
- Never operate the tool if you cannot be sure that underground utilities are not present.
- Do not wear loose fitting clothing when operating the tool.

TOOL STICKERS & TAGS

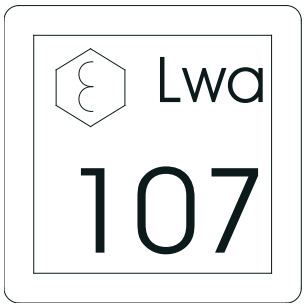
Please refer to the Parts Illustration for location of stickers.

28409
Composite Decal
CE Tool Only

11206
Circuit Type C Decal
CE Tool Only

CE

28322
CE Decal
CE Tool Only



58601
Sound Level Decal
CE Tool Only

BR40 BREAKER

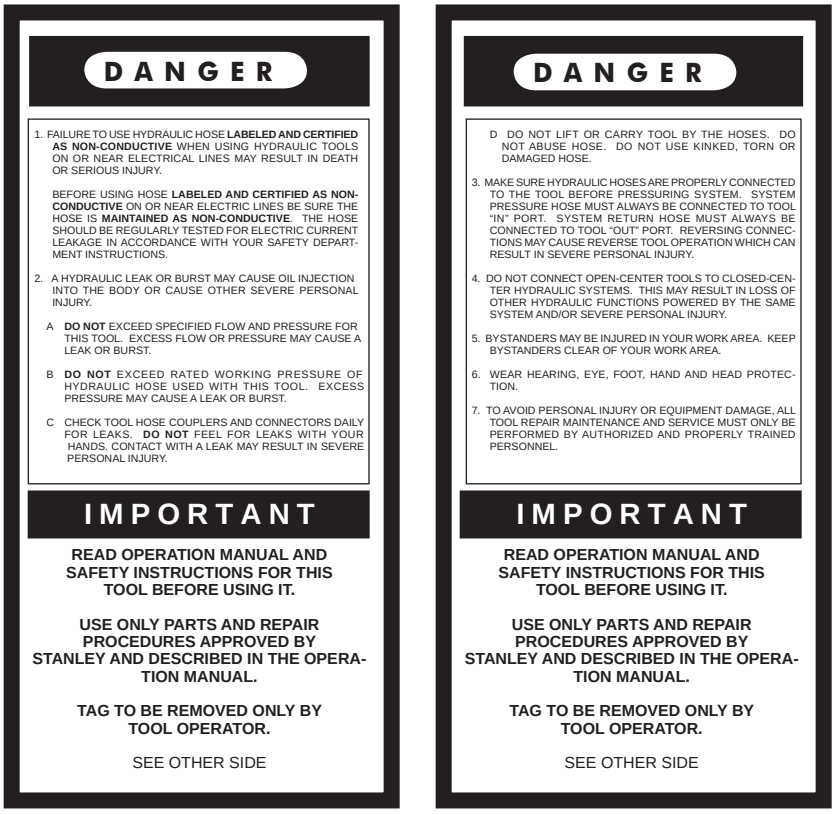
WEIGHT: 44 lb / 20 kg
FLOW: 6 gpm / 23 lpm
PRESSURE: 2000 psi / 140 bar

28374
BR40 Name Tag

STANLEY
Stanley Hydraulic tools
Division of the Stanley Works
3810 SE Naef Road
Milwaukie, OR 97267

05152
Stanley Decal

The safety tag (p/n 15875) at right is attached to the tool when shipped from the factory. Read and understand the safety instructions listed on this tag before removal. We suggest you retain this tag and attach it to the tool when not in use.



DANGER

1. FAILURE TO USE HYDRAULIC HOSE **LABELED AND CERTIFIED AS NON-CONDUCTIVE** WHEN USING HYDRAULIC TOOLS ON OR NEAR ELECTRICAL LINES MAY RESULT IN DEATH OR SERIOUS INJURY.

   BEFORE USING HOSE **LABELED AND CERTIFIED AS NON-CONDUCTIVE** ON OR NEAR ELECTRIC LINES BE SURE THE HOSE IS **MAINTAINED AS NON-CONDUCTIVE**. THE HOSE SHOULD BE REGULARLY TESTED FOR ELECTRIC CURRENT LEAKAGE IN ACCORDANCE WITH YOUR SAFETY DEPARTMENT INSTRUCTIONS.

2. A HYDRAULIC LEAK OR BURST MAY CAUSE OIL INJECTION INTO THE BODY OR CAUSE OTHER SEVERE PERSONAL INJURY.

   A **DO NOT** EXCEED SPECIFIED FLOW AND PRESSURE FOR THIS TOOL. EXCESS FLOW OR PRESSURE MAY CAUSE A LEAK OR BURST.

   B **DO NOT** EXCEED RATED WORKING PRESSURE OF HYDRAULIC HOSE USED WITH THIS TOOL. EXCESS PRESSURE MAY CAUSE A LEAK OR BURST.

   C CHECK TOOL HOSE COUPLERS AND CONNECTORS DAILY FOR LEAKS. **DO NOT** FEEL FOR LEAKS WITH YOUR HANDS. CONTACT WITH A LEAK MAY RESULT IN SEVERE PERSONAL INJURY.

IMPORTANT

READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.

USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY STANLEY AND DESCRIBED IN THE OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE

DANGER

D DO NOT LIFT OR CARRY TOOL BY THE HOSES. DO NOT ABUSE HOSE. DO NOT USE KINKED, TORN OR DAMAGED HOSE.

3. MAKE SURE HYDRAULIC HOSES ARE PROPERLY CONNECTED TO THE TOOL BEFORE PRESSURING SYSTEM. SYSTEM PRESSURE HOSE MUST ALWAYS BE CONNECTED TO TOOL "IN" PORT. SYSTEM RETURN HOSE MUST ALWAYS BE CONNECTED TO TOOL "OUT" PORT. REVERSING CONNECTIONS MAY CAUSE REVERSE TOOL OPERATION WHICH CAN RESULT IN SEVERE PERSONAL INJURY.

4. DO NOT CONNECT OPEN-CENTER TOOLS TO CLOSED-CENTER HYDRAULIC SYSTEMS. THIS MAY RESULT IN LOSS OF OTHER HYDRAULIC FUNCTIONS POWERED BY THE SAME SYSTEM AND/OR SEVERE PERSONAL INJURY.

5. BYSTANDERS MAY BE INJURED IN YOUR WORK AREA. KEEP BYSTANDERS CLEAR OF YOUR WORK AREA.

6. WEAR HEARING, EYE, FOOT, HAND AND HEAD PROTECTION.

7. TO AVOID PERSONAL INJURY OR EQUIPMENT DAMAGE, ALL TOOL REPAIR MAINTENANCE AND SERVICE MUST ONLY BE PERFORMED BY AUTHORIZED AND PROPERLY TRAINED PERSONNEL.

IMPORTANT

READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.

USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY STANLEY AND DESCRIBED IN THE OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE

SAFETY TAG P/N 15875 (shown smaller then actual size)

TOOL HOSE INFORMATION

HOSE TYPES

The rated working pressure of the hydraulic hose must be equal to or higher than the relief valve setting on the hydraulic system. There are three types of hydraulic hose that meet this requirement and are authorized for use with Stanley Hydraulic Tools. They are:

Certified non-conductive - constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. *Hose labeled **certified non-conductive** is the only hose authorized for use near electrical conductors.*

Wire-braided (conductive) - constructed of synthetic rubber inner tube, single or double wire braid reinforcement, and weather resistant synthetic rubber cover. *This hose is **conductive** and must never be used near electrical conductors.*

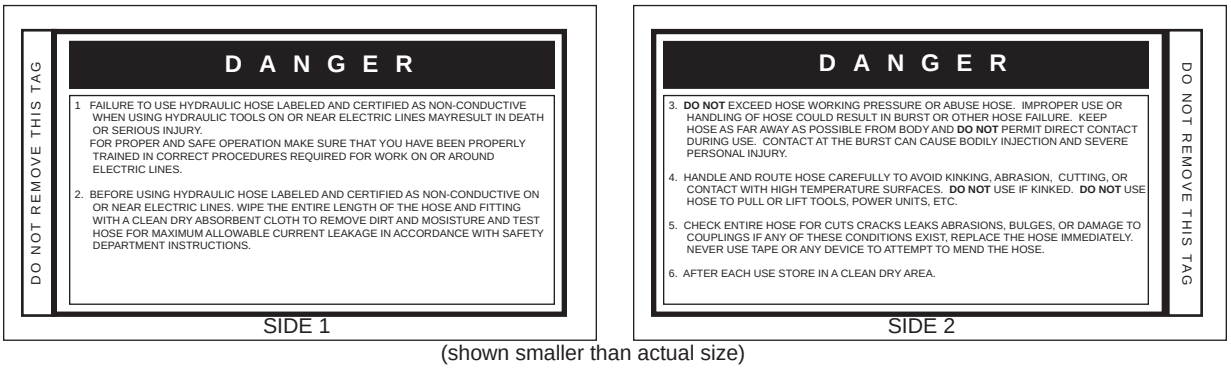
Fabric-braided (not certified or labeled non-conductive) - constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. *This hose is **not certified non-conductive** and must never be used near electrical conductors.*

HOSE SAFETY TAGS

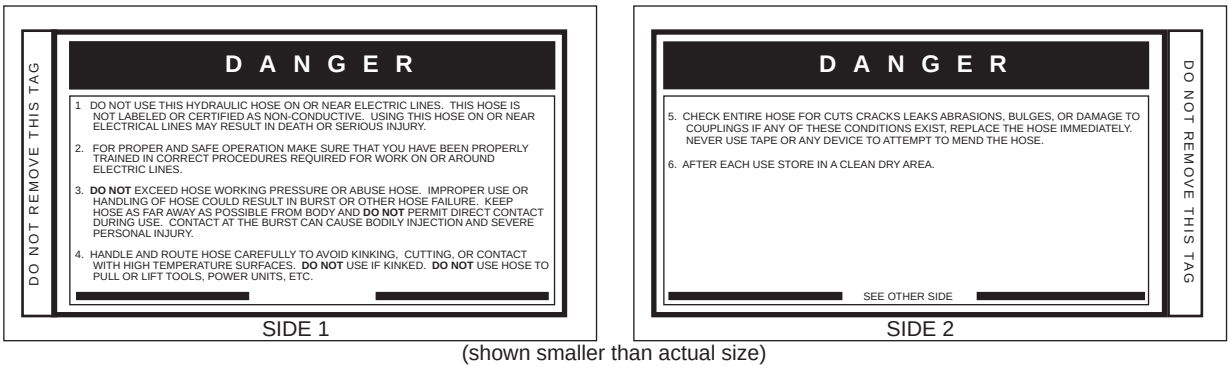
To help ensure your safety, the following DANGER tags are attached to all hose purchased from Stanley Hydraulic Tools. DO NOT REMOVE THESE TAGS.

If the information on a tag is illegible because of wear or damage, replace the tag immediately. A new tag may be obtained from your Stanley Distributor.

THE TAG SHOWN BELOW IS ATTACHED TO "CERTIFIED NON-CONDUCTIVE" HOSE


DO NOT REMOVE THIS TAG
D A N G E R
1 FAILURE TO USE HYDRAULIC HOSE LABELED AND CERTIFIED AS NON-CONDUCTIVE WHEN USING HYDRAULIC TOOLS ON OR NEAR ELECTRIC LINES MAYRESULT IN DEATH OR SERIOUS INJURY.
FOR PROPER AND SAFE OPERATION MAKE SURE THAT YOU HAVE BEEN PROPERLY TRAINED IN CORRECT PROCEDURES REQUIRED FOR WORK ON OR AROUND ELECTRIC LINES.
2. BEFORE USING HYDRAULIC HOSE LABELED AND CERTIFIED AS NON-CONDUCTIVE ON OR NEAR ELECTRIC LINES. WIPE THE ENTIRE LENGTH OF THE HOSE AND FITTING WITH A CLEAN DRY ABSORBENT CLOTH TO REMOVE DIRT AND MOSISTURE AND TEST HOSE FOR MAXIMUM ALLOWABLE CURRENT LEAKAGE IN ACCORDANCE WITH SAFETY DEPARTMENT INSTRUCTIONS.
SIDE 1
D A N G E R
3. DO NOT EXCEED HOSE WORKING PRESSURE OR ABUSE HOSE. IMPROPER USE OR HANDLING OF HOSE COULD RESULT IN BURST OR OTHER HOSE FAILURE. KEEP HOSE AS FAR AWAY AS POSSIBLE FROM BODY AND DO NOT PERMIT DIRECT CONTACT DURING USE. CONTACT AT THE BURST CAN CAUSE BODILY INJECTION AND SEVERE PERSONAL INJURY.
4. HANDLE AND ROUTE HOSE CAREFULLY TO AVOID KINKING, ABRASION, CUTTING, OR CONTACT WITH HIGH TEMPERATURE SURFACES. DO NOT USE IF KINKED. DO NOT USE HOSE TO PULL OR LIFT TOOLS, POWER UNITS, ETC.
5. CHECK ENTIRE HOSE FOR CUTS CRACKS LEAKS ABRASIONS, BULGES, OR DAMAGE TO COUPLINGS IF ANY OF THESE CONDITIONS EXIST, REPLACE THE HOSE IMMEDIATELY. NEVER USE TAPE OR ANY DEVICE TO ATTEMPT TO MEND THE HOSE.
6. AFTER EACH USE STORE IN A CLEAN DRY AREA.
DO NOT REMOVE THIS TAG
SIDE 2
(shown smaller than actual size)

THE TAG SHOWN BELOW IS ATTACHED TO "CONDUCTIVE" HOSE.


DO NOT REMOVE THIS TAG
D A N G E R
1 DO NOT USE THIS HYDRAULIC HOSE ON OR NEAR ELECTRIC LINES. THIS HOSE IS NOT LABELED OR CERTIFIED AS NON-CONDUCTIVE. USING THIS HOSE ON OR NEAR ELECTRICAL LINES MAY RESULT IN DEATH OR SERIOUS INJURY.
2. FOR PROPER AND SAFE OPERATION MAKE SURE THAT YOU HAVE BEEN PROPERLY TRAINED IN CORRECT PROCEDURES REQUIRED FOR WORK ON OR AROUND ELECTRIC LINES.
3. DO NOT EXCEED HOSE WORKING PRESSURE OR ABUSE HOSE. IMPROPER USE OR HANDLING OF HOSE COULD RESULT IN BURST OR OTHER HOSE FAILURE. KEEP HOSE AS FAR AWAY AS POSSIBLE FROM BODY AND DO NOT PERMIT DIRECT CONTACT DURING USE. CONTACT AT THE BURST CAN CAUSE BODILY INJECTION AND SEVERE PERSONAL INJURY.
4. HANDLE AND ROUTE HOSE CAREFULLY TO AVOID KINKING, CUTTING, OR CONTACT WITH HIGH TEMPERATURE SURFACES. DO NOT USE IF KINKED. DO NOT USE HOSE TO PULL OR LIFT TOOLS, POWER UNITS, ETC.
SIDE 1
D A N G E R
5. CHECK ENTIRE HOSE FOR CUTS CRACKS LEAKS ABRASIONS, BULGES, OR DAMAGE TO COUPLINGS IF ANY OF THESE CONDITIONS EXIST, REPLACE THE HOSE IMMEDIATELY. NEVER USE TAPE OR ANY DEVICE TO ATTEMPT TO MEND THE HOSE.
6. AFTER EACH USE STORE IN A CLEAN DRY AREA.
SEE OTHER SIDE
DO NOT REMOVE THIS TAG
SIDE 2
(shown smaller than actual size)

Tool to Hydraulic Circuit Hose Recommendations

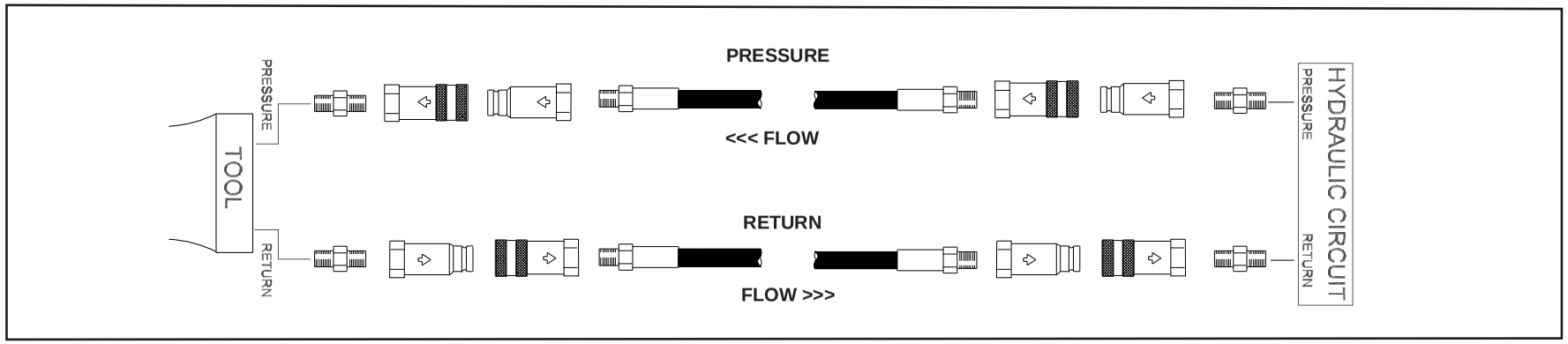
The chart to the right shows recommended minimum hose diameters for various hose lengths based on gallons per minute (gpm)/liters per minute (lpm). These recommendations are intended to keep return line pressure (back pressure) to a minimum acceptable level to ensure maximum tool performance.

This chart is intended to be used for hydraulic tool applications only based on Stanley Hydraulic Tools tool operating requirements and should not be used for any other applications.

All hydraulic hose must have at least a rated minimum working pressure equal to the maximum hydraulic system relief valve setting.

All hydraulic hose must meet or exceed specifications as set forth by SAE J517.

Oil Flow		Hose Lengths		Inside Diameter		USE (Press/Return)	Min. Working Pressure	
GPM	LPM	FEET	METERS	INCH	MM		PSI	BAR
Certified Non-Conductive Hose - Fiber Braid - for Utility Bucket Trucks								
4-9	15-34	up to 10	up to 3	3/8	10	Both	2250	155
Conductive Hose - Wire Braid or Fiber Braid -DO NOT USE NEAR ELECTRICAL CONDUCTORS								
4-6	15-23	up to 25	up to 7.5	3/8	10	Both	2500	175
4-6	15-23	26-100	7.5-30	1/2	13	Both	2500	175
5-10.5	19-40	up to 50	up to 15	1/2	13	Both	2500	175
5-10.5	19-40	51-100	15-30	5/8	16	Both	2500	175
5-10.5	19-40	100-300	30-90	5/8	16	Pressure	2500	175
				3/4	19	Return	2500	175
10-13	38-49	up to 50	up to 15	5/8	16	Both	2500	175
10-13	38-49	51-100	15-30	5/8	16	Pressure	2500	175
				3/4	19	Return	2500	175
10-13	38-49	100-200	30-60	3/4	19	Pressure	2500	175
				1	25.4	Return	2500	175
13-16	49-60	up to 25	up to 8	5/8	16	Pressure	2500	175
				3/4	19	Return	2500	175
13-16	49-60	26-100	8-30	3/4	19	Pressure	2500	175
				1	25.4	Return	2500	175



Typical Hose Connections

HTMA REQUIREMENTS

HYDRAULIC SYSTEM REQUIREMENTS	TOOL CATEGORY TYPE 1	 TYPE II	TYPE III	TYPE RR
FLOW RATE	4-6 gpm (15-23 lpm)	7-9 gpm (26-34 lpm)	11-13 gpm (42-49 lpm)	9-10.5 gpm (34-40 lpm)
TOOL OPERATING PRESSURE (at the power supply outlet)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)
SYSTEM RELIEF VALVE SETTING (at the power supply outlet)	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)	2200-2300 psi (152-159 bar)
MAXIMUM BACK PRESSURE (at tool end of the return hose)	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)
Measured at a max. fluid viscosity of: (at min. operating temperature)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)
TEMPERATURE Sufficient heat rejection capacity to limit max. fluid temperature to: (at max. expected ambient temperature)	140° F (60° C)	140° F (60° C)	140° F (60° C)	140° F (60° C)
Min. cooling capacity at a temperature difference of between ambient and fluid temps	3 hp (2.24 kW) 40° F (22° C)	5 hp (3.73 kW) 40° F (22° C)	7 hp (4.47 kW) 40° F (22° C)	6 hp (5.22 kW) 40° F (22° C)
NOTE: Do not operate the tool at oil temperatures above 140° F (60° C). Operation at higher temperatures can cause operator discomfort at the tool.				
FILTER Min. full-flow filtration Sized for flow of at least: (For cold temp. startup and max. dirt-holding capacity)	25 microns 30 gpm (114 lpm)	25 microns 30 gpm (114 lpm)	25 microns 30 gpm (114 lpm)	25 microns 30 gpm (114 lpm)
HYDRAULIC FLUID Petroleum based (premium grade, anti-wear, non-conductive) VISCOSITY (at min. and max. operating temps)	100-400 ssu*	100-400 ssu*	100-400 ssu* (20-82 centistokes)	100-400 ssu*
NOTE: When choosing hydraulic fluid, the expected oil temperature extremes that will be experienced in service determine the most suitable temperature viscosity characteristics. Hydraulic fluids with a viscosity index over 140 will meet the requirements over a wide range of operating temperatures.				

*SSU = Saybolt Seconds Universal

NOTE:

These are general hydraulic system requirements. See tool Specification page for tool specific requirements.

OPERATION

The recommended hose size is .500 inch/12 mm I.D. up to 50 ft/15 m long and .625 inch/16 mm I.D. minimum up to 100 ft/30 m.

PRE-OPERATION PROCEDURES

CHECK POWER SOURCE

1. Using a calibrated flowmeter and pressure gauge, check that the hydraulic power source develops a flow of 4-6 gpm/15-23 lpm at 1300 psi/90 bar.

2. Make certain the hydraulic power source is equipped with a relief valve set to open at 2250 psi/155 bar maximum.

INSTALL TOOL BIT

1. Rotate the latch on the breaker foot downward (pointing away from the tool).

2. Insert the tool bit into the foot and pull the latch up to lock the tool bit in place.

CONNECT HOSES

1. Wipe all hose couplers with a clean, lint-free cloth before making connections.

2. Connect the hoses from the hydraulic power source to the tool fittings or quick disconnects. It is a good practice to connect return hoses first and disconnect them last to minimize or avoid trapped pressure within the tool.

3. Observe flow indicators stamped on hose couplers to ensure that fluid flow is in the proper direction. The female coupler on the tool hose is the inlet coupler.

4. Move the hydraulic circuit control valve to the ON position to operate the tool.

NOTE:
If uncoupled hoses are left in the sun, pressure increase within the hoses may make them difficult to connect. When possible, connect the free ends of the hoses together.

OPERATION PROCEDURES

1. Observe all safety precautions.

2. Install the appropriate tool bit for the job.

3. Place the bit firmly on the surface to be broken.

4. Squeeze the trigger to start the breaker. Adequate down pressure is very important. When the tool bit breaks through the obstruction or becomes bound, release the trigger and reposition the tool bit.

NOTE:
Partially depressing the trigger allows the tool to run at slow speed. Slow-speed operation permits easier starting of the tool bit into the work surface.

5. To start, break an opening (hole) in the center of the surface. After making a hole, break portions of the material into the original opening. For best productivity, the breaking should be done around the original hole.

The size of the broken material will vary with the strength and thickness of the base material and the amount of any reinforcement wire or rebar.

Harder material or more reinforcing wire or rebar will require taking smaller bites. To determine the most effective bite, start with 2 in. / 50 mm or smaller bites.

Bites can then be gradually increased until the broken piece becomes too large, requiring increased time to break off the piece.

Sticking of the tool bit occurs when too large a bite is being taken and the tool bit hammers into the material without the material fracturing. This causes the tool bit to become trapped in the surrounding material.

COLD WEATHER OPERATION

If the breaker is to be used during cold weather, preheat the hydraulic fluid at low engine speed. When using the normally recommended fluid, fluid temperature should be at or above 50° F/10° C (400 ssu/82 centistokes) before use.

Damage to the hydraulic system or breaker can result from use with fluid that is too viscous or thick.

EQUIPMENT PROTECTION & CARE

NOTICE

In addition to the Safety Precautions found in this manual, observe the following for equipment protection and care.

- Make sure all couplers are wiped clean before connection.
- The hydraulic circuit control valve must be in the “OFF” position when coupling or uncoupling hydraulic tools. Failure to do so may result in damage to the quick couplers and cause overheating of the hydraulic system.
- Always store the tool in a clean dry space, safe from damage or pilferage.
- Make sure the circuit PRESSURE hose (with male quick disconnect) is connected to the “IN” port. The circuit RETURN hose (with female quick disconnect) is connected to the opposite port. Do not reverse circuit flow. This can cause damage to internal seals.
- Always replace hoses, couplings and other parts with replacement parts recommended by Stanley Hydraulic Tools. Supply hoses must have a minimum working pressure rating of 2500 psi/172 bar.
- Do not exceed the rated flow (see Specifications) in this manual for correct flow rate and model number. Rapid failure of the internal seals may result.
- Always keep critical tool markings, such as warning stickers and tags legible.
- Do not force a small breaker to do the job of a large breaker.
- Keep tool bit sharp for maximum breaker performance. Make sure that tool bits are not chipped or rounded on the striking end.
- Never operate a breaker without a tool bit or without holding it against the work surface. This puts excessive strain on the breaker foot.
- Tool repair should be performed by experienced personnel only.
- Make certain that the recommended relief valves are installed in the pressure side of the system.
- Do not use the tool for applications for which it was not intended.

TROUBLESHOOTING

PROBLEM	CAUSE	REMEDY
Tool does not run.	Power unit not functioning.	Check power unit for porer flow and pressure (4-6 gpm/15-23 lpm, 1300-2000 psi/90-140 bar.
	Couplers or hoses blocked.	Remove restriction.
	Pressure and return line hoses reversed at ports.	Be sure hoses are connected to their proper ports.
	Mechanical failure of piston or automatic valve.	Disassemble breaker and inpsect for damaged parts.
Tool does not hit effectively.	Power unit not functioning.	Check power unit for porer flow and pressure (4-6 gpm/15-23 lpm, 1300-2000 psi/90-140 bar.
	Couplers or hoses blocked.	Remove restriction.
	Low accumulator charge (pressure hose will pulse more than normal).	Recharge accumulator. Replace diaphragm if charge loss continues.
	Fluid too hot (above 140°F/60°C).	Provide cooler to maintain proper fluid temperature (130°F/55°C).
Tool operates slow.	Low gpm supply from power unit.	Check power unit for proper flow (4-6 gpm/15-23 lpm).
	High backpressure.	Check hydraulic system for excessive backpressure (over 200 psi/14 bar).
	Couplers or hoses blocked.	Remove restriction.
	Orifice plug blocked.	Remove restriction.
	Fluid too hot (above 140°F/60°C) or too cold (below 60°F/16°C).	Check power unit for proper fluid temperature. Bypass cooler to warm the fluid or provide cooler to maintain proper temperature.
	Relief valve set too low.	Adjust relief valve to 2100-2250 psi/145-155 bar.
Tool gets hot.	Hot fluid going through tool.	Check power unit. Be sure flow rate is not too high causing part of the fluid to go through the relief valve. Provide cooler to maintain proper fluid temperature (140°F/60°C max). Check the relief valve setting. Eliminate flow control devices.
Fluid leakage on tool bit.	Lower piston seal failure.	Replace seal.
Fluid leakage around trigger.	Valve spool seal failure.	Replace seals.

CHARGING THE ACCUMULATOR

ACCUMULATOR TESTING PROCEDURE

To check or charge the accumulator the following equipment is required:

31254 Charge Kit: which includes the following.
• Accumulator Tester (Part Number 02835).
• Charging Assembly (Part Number 15304) (15304 includes a liquid filled gauge w/snub valve, hose and fittings).

• NITROGEN bottle with an 800 psi/55 bar minimum charge.(Not included in 31254 kit)

1. Remove the plug from the handle or handle pivot.

2. Holding the chuck end of Accumulator Tester (Part Number 02835) turn the gauge fully counterclockwise to ensure that the stem inside the chuck is completely retracted.

3. Thread the tester onto the accumulator charging valve. Do not advance the gauge-end into the chuck-end. Turn as a unit. Seat the chuck on the accumulator charging valve and hand tighten only.

4. Advance the valve stem of the tester by turning the gauge-end clockwise until a pressure is read on the gauge (charge pressure should be 500-700 psi/34-48 bar).

5. If pressure is OK unscrew the gauge-end from the chuck to retract the stem, then unscrew the entire tester assembly from the accumulator charging valve. If pressure is low, charge the accumulator as described in the following paragraph.

6. Install the plug.

ACCUMULATOR CHARGING

1. Perform steps 1 through 4 of the accumulator testing procedure above.

2. Connect the chuck of the charging assembly to the charging valve on the accumulator tester or, if preferred, remove the tester from the charging valve and connect the charging assembly chuck directly to the charging valve.

3. Adjust the snub valve to a charging pressure of 600 psi/42 bar. Note: While watching the pressure gauge, open snub valve slowly until it reaches the proper charge pressure (600-700 psi).

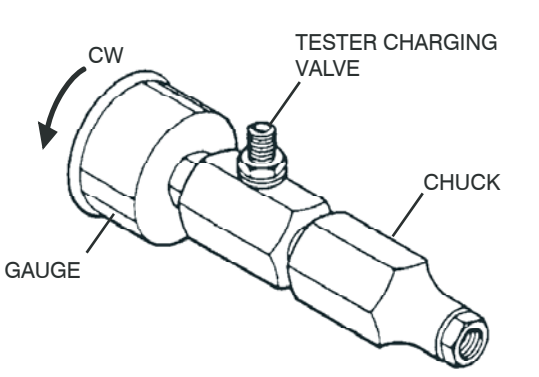
NOTE:
It may be necessary to set the gauge at 650-700 psi/45-48 bar to overcome any pressure drop through the charging system.

4. When the accumulator is fully charged close the snub valve on the charging assembly hose and remove the charging assembly chuck from the accumulator tester or tool charging valve.

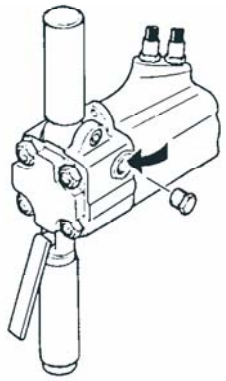
5. If the accumulator tester has been used, be sure to turn the gauge-end fully counterclockwise before removing the tester from the charging valve of the tool. Install the valve cap.

CHARGING THE ACCUMULATOR

Charging the Accumulator (BR40 with Anti-Vibration Handles)

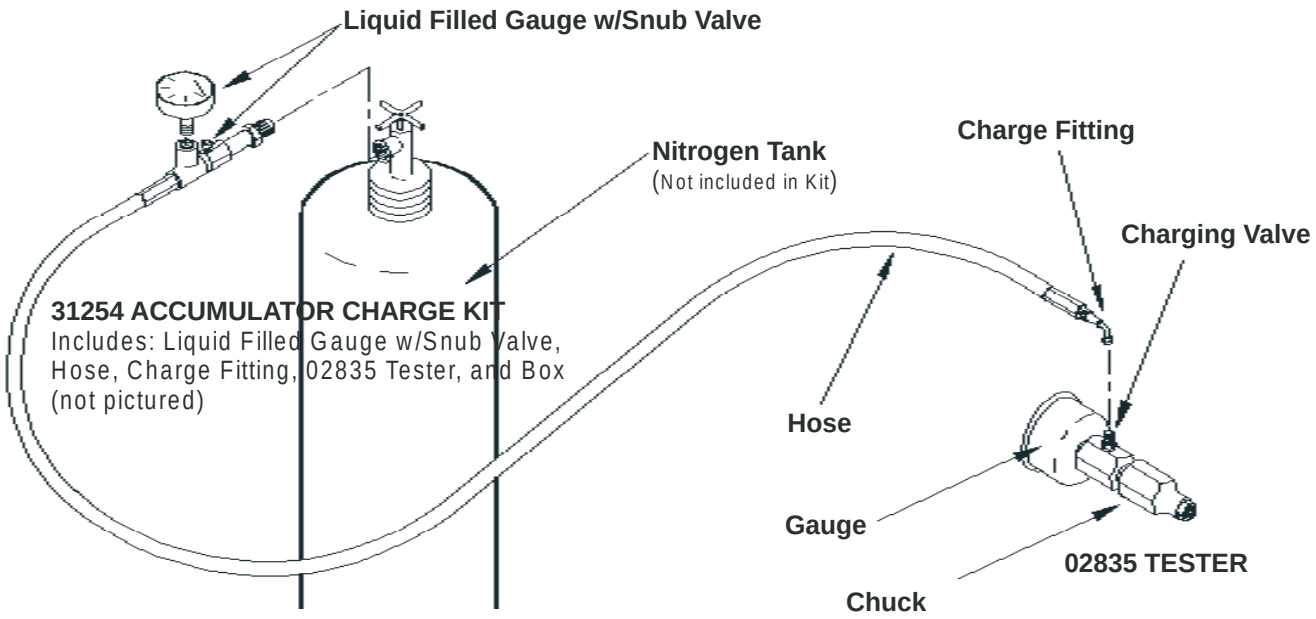


ACCUMULATOR TESTER (P/N 02835)

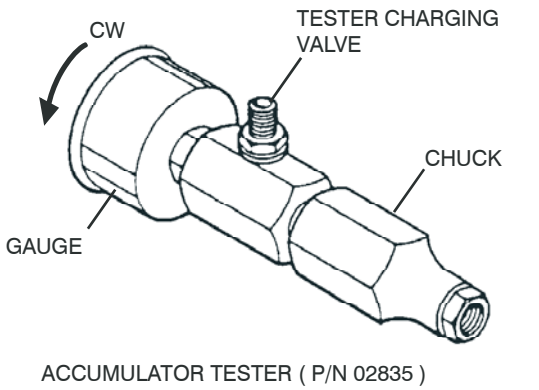


LOCATION OF CHARGING VALVE

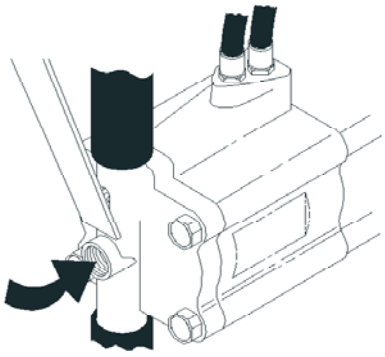
Figure 2



Charging the Accumulator (BR40 with T-Handles)



ACCUMULATOR TESTER (P/N 02835)



LOCATION OF CHARGING VALVE

Figure 2

SPECIFICATIONS

Pressure Range	1300-2000 psi/90-140 bar
Flow Range	4-6 gpm / 15-23 lpm
Optimum Flow	5 gpm / 20 lpm
Maximum Back Pressure	250 Psi/17 bar
Couplers	HTMA Flush Face (Per NFPA T3.20.15/ISO 16028)
Connect Size & Type	3/8 in. Male Pipe Hose Ends
Weight	T-Handle 41 lbs / 18 kg Anti_Vibration Handle 44 lbs / 20 kg
Overall Length	T-Handle 23.5 in. / 60 cm Anti-Vibration Handle 25.2 in. / 65 cm
Overall Width at Handles	T-Handle 14 in. / 35 cm Anti-Vibration Handle 17.5 in. / 44.5 cm
Max. Fluid Temperature	140°F / 60°C
System Type	Open or Closed Center
Port Size	SAE 8 O-ring
HTMA Class I	4-6 gpm @ 1300-2000 psi
Guaranteed Sound Power Level	107 dBA
Vibration Level	T-Handle 10.0 m/sec^2 Anti-Vibration Handle 9.2 m/sec^2

ACCESSORIES

1in. Hex x 4-1/4 in. Shank

Moil Point - 14 in. Long UC	07702
Narrow Chisel Point - 14 in. Long UC	07703
3-inch Chisel - 14 in. Long UC	07704
Clay Spade - 5-1/2 in. Blade	07705
Asphalt Wedge - 3 in. Wide	07706

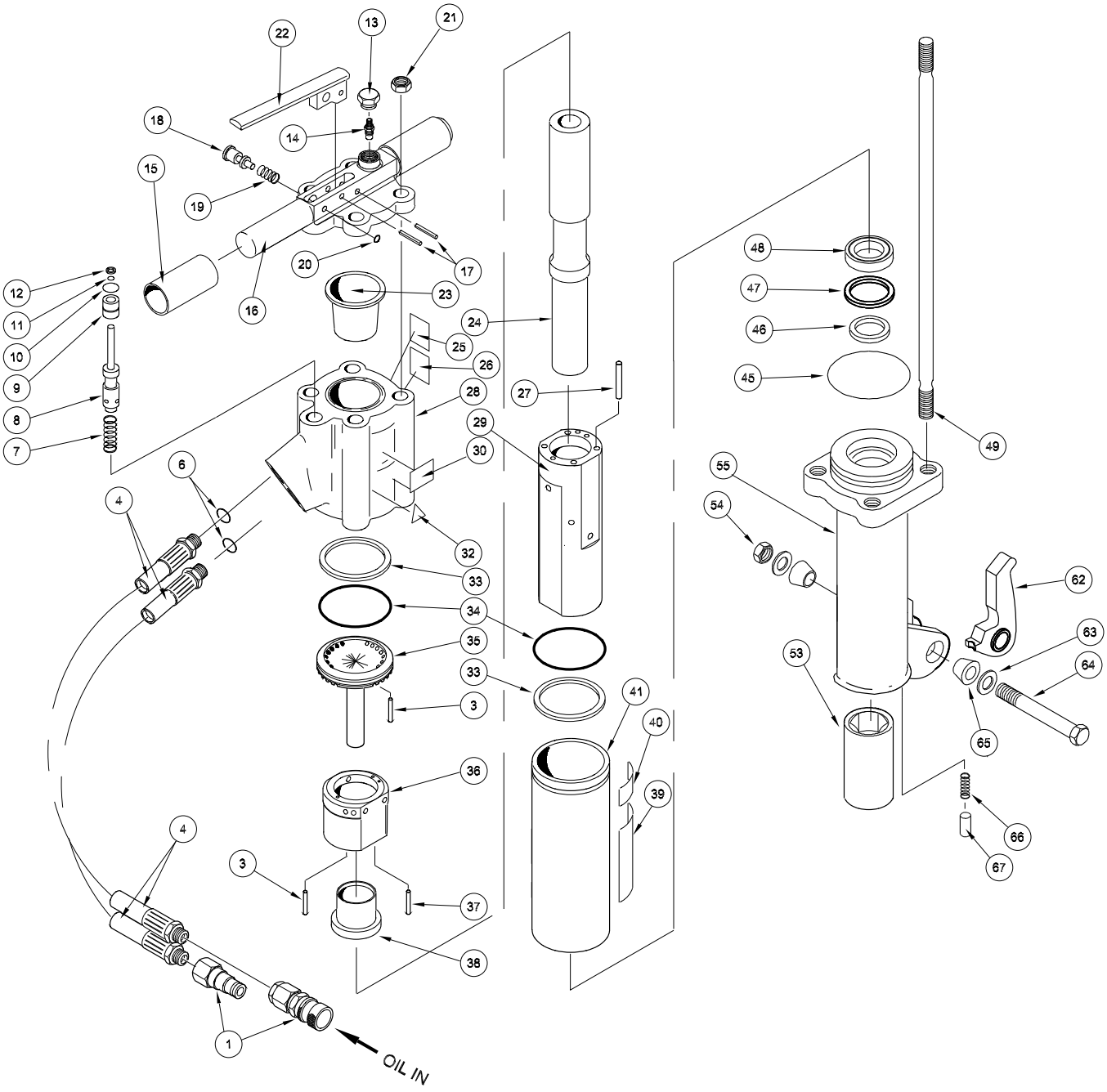
Test Equipment

Accumulator Charge Assembly (incl. Liquid Filled Gauge w/ Valve, Hose, & Charge Fitting)	15304
Accumulator Tester	02835
Flow and Pressure Tester	04182
Accumulator Charge Kit	31254

Service Tools

Tamper Sleeve Tool	01120
O-Ring Tool Kit	04337
Flow Sleeve Removal Tube	04910
Flow Sleeve Removal Tool	04919
Accumulator Cylinder Puller	05640

BR40 T-HANDLE PARTS ILLUSTRATION



BR40 T-HANDLE PARTS LIST

Item No.	Part No.	Qty	Description
1	03971	1	Coupler Set
2	-----		No Item
3	02900	2	Roll Pin
4	01652	2	Alternate Hose Assy. - 12 inch.
5	12832	1	Orifice Plug
6	01605	2	O-Ring, Included with Item 4
7	04058	1	Spring
8	04077	1	Valve Spool
9	04057	1	Bushing
	07699	1	Bushing Assy. Includes Items 9 thru 12
10	00293	1	O-Ring, 11/16 x 7/8 x 3/32
11	01362	1	O-Ring, 5/16 x 7/16 x 1/16
12	04056	1	Rod Wiper
13	07493	1	Plug
14	20499	1	Charge Valve
15	02494	2	Handle Grip
16	07483	1	Handle
	11358	1	Handle, Trigger Lock Models
17	07492	2	Spirol Pin, 1/4 x 1
18	07594	1	Trigger Lock
19	07593	1	Spring
20	00224	1	Retainer Ring
21	04374	4	Locknut, 5/8-18
22	04371	1	Trigger
23	07479	1	Accumulator Diaphragm
24	12833	1	Piston
25	58601	1	Sound Power Level Decal
26	28409	1	Composite Safety Decal
27	04605	4	Push Pin
28	11588	1	Accumulator Valve Block
29	07485	1	Flow Sleeve
30	28322	1	CE Decal
31			No Item
32	11206	1	Circuit Type C Decal
33	04381	2	Back-Up Ring
34	04379	2	O-Ring, 2-9/16 x 2-3/4 x 3/32
35	04378	1	Porting Block
36	07480	1	Automatic Valve Body
37	04571	2	Push Pin
38	04382	1	Automatic Valve
39	05152	1	Stanley Decal
40	28374	1	Model Number Decal
	12835	1	Name Tag, BR40550

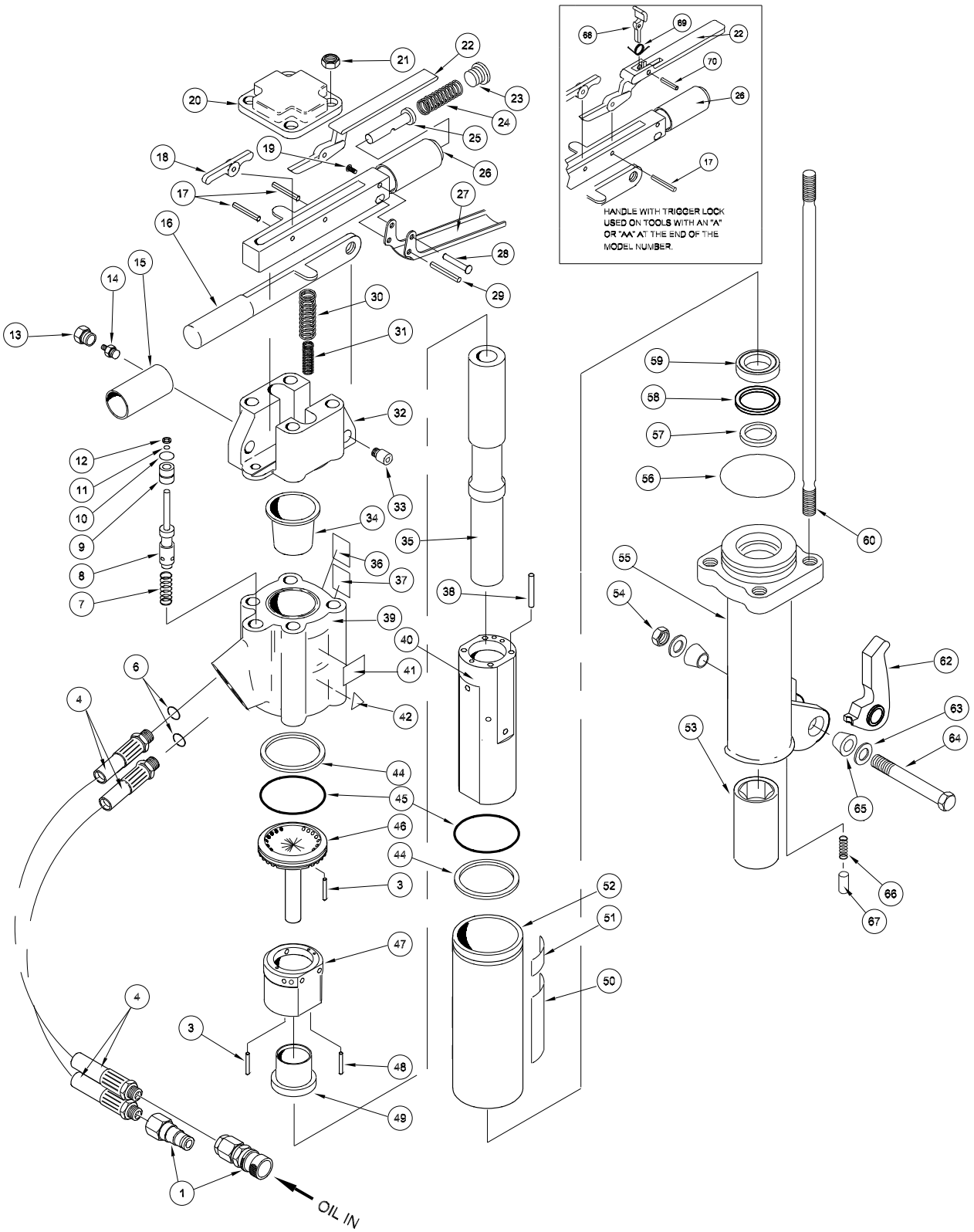
Item No.	Part No.	Qty	Description
41	04383	1	Flow Sleeve Tube
42	07477	1	Hex Bushing
43	-----		No Item
44	07445	1	Breaker Foot
45	02022	1	O-Ring, 2-1/4 x 2-1/2 x 1/8*
46	04387	1	Rod Wiper
47	04780	1	Back-Up Washer
48	04386	4	Cup Seal
49	04373	1	Side Rod
50			No Item
51	04394	1	Latch*
52	04716	1	Spring Washer*
53	04717	1	Foot Latch Bolt*
54	04715	2	Rubber Sleeve*
55	04392	1	Spring*
56	04393	1	Detent*

*Part of Breaker Foot Assembly

BREAKER FOOT ASSEMBLY (T-Handle and Anti-Vibration Handle)		
Part No.	Size	Model
07489	1 in. Standard Rotated Hex	BR40558BT/BR40550 (Includes 42-48 & 51-56)
07510	1 in. Standard	BR4056801/BR4056201 (Includes 42-48 & 51-56)

SEAL KIT PART NUMBER 04595

BR40 ANTI-VIBRATION HANDLE PARTS ILLUSTRATION



BR40 ANTI-VIBRATION HANDLE PARTS LIST

Item No.	Part No.	Qty	Description
1	03971	1	Coupler Set
2			
3	02900	2	Roll Pin
4	01652	2	Hose Assembly, 12 inch
	09546	2	Hose Assembly, 18 inch
5			
6	01605	2	O-Ring, Included with Item 4
7	04058	1	Spring
8	20515	1	Valve Spool
9	04057	1	Bushing
10	00293	1	O-Ring, 11/16 x 7/8 x 3/32
11	01362	1	O-Ring, 5/16 x 7/16 x 1/16
12	04056	1	Rod Wiper
13	07493	1	Plug
14	20499	1	Charge Valve
	09349	1	Valve Cap, Not Pictured
15	02494	2	Handle Grip
16	28369	1	Handle, Guarded
17	20500	2	Spirol Pin 1/4 x 1
18	20511	1	Lever
19	32297	1	Slotted Machine Screw (Trigger Lock Model)
20	28494	1	Top Plate
21	04374	4	Lock Nut 5/8-18
22	20502	1	Trigger
	58526	1	Trigger (Used on Model # ending in A or AA)
23	16607	1	SAE O-Ring Plug #10 (Trigger Lock Models)
24	24964	1	Spring (Trigger Lock Models)
25	26599	1	Pin (Trigger Lock Models)
26	31565	1	Trigger Handle (Trigger Lock Models)
	29045	1	Trigger Handle (Non-Trigger Lock Models)
	58529	1	Trigger Handle (Used on Model # ending in A or AA)
27	24948	1	Trigger Lock (Trigger Lock Models)
28	31917	1	Trigger Pin (Trigger Lock Models)
29	21089	1	Roll Pin, 1/4 x 1-3/8 (Trigger Lock Models)
30	20540	2	Spring
31	20541	2	Spring
	20498	2	Spring (Trigger Lock Models)
32	20505	1	Handle Pivot
33	20508	2	Pivot Screw
34	07479	1	Accumulator Diaphragm
35	12833	1	Piston
36	58601	1	Guaranteed Sound Power Level CE Model
37	28409	1	Composite Safety Label (CE Models)
38	04605	4	Push Pin

Item No.	Part No.	Qty	Description
39	11588	1	Accumulator Valve Block
40	07485	1	Flow Sleeve
41	28322	1	CE Decal
42	11206	1	Circuit “C” Decal
43			No Item
44	04381	2	Back-Up Ring
45	04379	2	O-Ring, 2-9/16 x 2-3/4 x 3/32
46	04378	1	Porting Block
47	07480	1	Automatic Valve Body
48	04571	2	Push Pin
49	04382	1	Automatic Valve
50	05152	1	Stanley Decal
51	28374	1	BR40 Model Number Decal
52	04383	1	Flow Sleeve Tube
53	07477	1	Hex Bushing*
54	04374	1	Stop Nut*
55	07445	1	Breaker Foot with Insert Assy
56	02022	1	O-Ring, 2-1/4 x 2-1/2 x 1/8-228 R16*
57	04387	1	Rod Wiper
58	04780	1	Back-Up Washer
59	04386	1	Cup Seal
60	20517	4	Side Rod
61			No Item
62	04394	1	Latch*
63	04716	2	Spring Washer*
64	04717	1	Foot Latch Bolt*
65	04715	2	Rubber Sleeve*
66	04392	1	Spring*
67	04393	1	Detent*
68	58527	1	Trigger Lock (Used on Model # ending in A or AA)
69	66828	1	Torsion Spring (Used on Model # ending in A or AA)
70	07624	1	Roll Pin (Used on Model # ending in A or AA)

BREAKER FOOT ASSEMBLY (T-Handle and Anti-Vibration Handle)		
Part No.	Size	Model
07489	1 in. Standard Rotated Hex	BR40558BT/BR40550 (Includes 53-59 & 62-67)
07510	1 in. Standard	BR4056801/BR4056201 BR4056801A/ BR4056801AA (Includes 53-59 & 62-67)

SEAL KIT PART NUMBER 04595

WARRANTY

Stanley Hydraulic Tools (hereinafter called “Stanley”), subject to the exceptions contained below, warrants new hydraulic tools for a period of one year from the date of sale to the first retail purchaser, or for a period of 2 years from the shipping date from Stanley, whichever period expires first, to be free of defects in material and/or workmanship at the time of delivery, and will, at its option, repair or replace any tool or part of a tool, or new part, which is found upon examination by a Stanley authorized service outlet or by Stanley’s factory in Milwaukie, Oregon to be DEFECTIVE IN MATERIAL AND/OR WORKMANSHIP.

EXCEPTIONS FROM WARRANTY

NEW PARTS: New parts which are obtained individually are warranted, subject to the exceptions herein, to be free of defects in material and/or workmanship at the time of delivery and for a period of 6 months after the date of first usage. Seals and diaphragms are warranted to be free of defects in material and/or workmanship at the time of delivery and for a period of 6 months after the date of first usage or 2 years after the date of delivery, whichever period expires first. Warranty for new parts is limited to replacement of defective parts only. Labor is not covered.

FREIGHT COSTS: Freight costs to return parts to Stanley, if requested by Stanley for the purpose of evaluating a warranty claim for warranty credit, are covered under this policy if the claimed part or parts are approved for warranty credit. Freight costs for any part or parts which are not approved for warranty credit will be the responsibility of the individual.

SEALS & DIAPHRAGMS: Seals and diaphragms installed in new tools are warranted to be free of defects in material and/or workmanship for a period of 6 months after the date of first usage, or for a period of 2 years from the shipping date from Stanley, whichever period expires first.

CUTTING ACCESSORIES: Cutting accessories such as breaker tool bits are warranted to be free of defects in material and or workmanship at the time of delivery only.

ITEMS PRODUCED BY OTHER MANUFACTURERS: Components which are not manufactured by Stanley and are warranted by their respective manufacturers.

a. Costs incurred to remove a Stanley manufactured component in order to service an item manufactured by other manufacturers.

ALTERATIONS & MODIFICATIONS: Alterations or modifications to any tool or part. All obligations under this warranty shall be terminated if the new tool or part is altered or modified in any way.

NORMAL WEAR: any failure or performance deficiency attributable to normal wear and tear such as tool bushings, retaining pins, wear plates, bumpers, retaining rings and plugs, rubber bushings, recoil springs, etc.

INCIDENTAL/CONSEQUENTIAL DAMAGES: To the fullest extent permitted by applicable law, in no event will STANLEY be liable for any incidental, consequential or special damages and/or expenses.

FREIGHT DAMAGE: Damage caused by improper storage or freight handling.

LOSS TIME: Loss of operating time to the user while the tool(s) is out of service.

IMPROPER OPERATION: Any failure or performance deficiency attributable to a failure to follow the guidelines and/or procedures as outlined in the tool’s operation and maintenance manual.

MAINTENANCE: Any failure or performance deficiency attributable to not maintaining the tool(s) in good operating condition as outlined in the Operation and Maintenance Manual.

HYDRAULIC PRESSURE & FLOW, HEAT, TYPE OF FLUID: Any failure or performance deficiency attributable to excess hydraulic pressure, excess hydraulic back-pressure, excess hydraulic flow, excessive heat, or incorrect hydraulic fluid.

REPAIRS OR ALTERATIONS: Any failure or performance deficiency attributable to repairs by anyone which in Stanley’s sole judgement caused or contributed to the failure or deficiency.

MIS-APPLICATION: Any failure or performance deficiency attributable to mis-application. “Mis-application” is defined as usage of products for which they were not originally intended or usage of products in such a matter which exposes them to abuse or accident, without first obtaining the written consent of Stanley. PERMISSION TO APPLY ANY PRODUCT FOR WHICH IT WAS NOT ORIGINALLY INTENDED CAN ONLY BE OBTAINED FROM STANLEY ENGINEERING.

WARRANTY REGISTRATION: STANLEY ASSUMES NO LIABILITY FOR WARRANTY CLAIMS SUBMITTED FOR WHICH NO TOOL REGISTRATION IS ON RECORD. In the event a warranty claim is submitted and no tool registration is on record, no warranty credit will be issued without first receiving documentation which proves the sale of the tool or the tools’ first date of usage. The term “DOCUMENTATION” as used in this paragraph is defined as a bill of sale, or letter of intent from the first retail customer. A WARRANTY REGISTRATION FORM THAT IS NOT ALSO ON RECORD WITH STANLEY WILL NOT BE ACCEPTED AS “DOCUMENTATION”.

NO ADDITIONAL WARRANTIES OR REPRESENTATIONS

This limited warranty and the obligation of Stanley thereunder is in lieu of all other warranties, expressed or implied including merchantability or fitness for a particular purpose except for that provided herein. There is no other warranty. This warranty gives the purchaser specific legal rights and other rights may be available which might vary depending upon applicable law.

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